Customer : ROXBURGH ELECTRONICS LIMITED

No. AD-97-2278

Date : Feb. 25, 1997

Attention:

Your ref. No:

Your Part. No : 29 0044

SPECIFICATIONS

ALPS ' ;

MODEL RK097111202SA (20kA)

Spec. No. :

Sample No. : ----------

RECEIPT STATUS

RECEIVED

By. Date

Signature

Name

Title

ALPS ELECTRIC CO., LTD.

HEAD OFFICE
1-7, YUKIGAYA-OHTSUKA-CHO,
OHTA-KU, TOKYO 145 JAPAN

DSG'D Y. Tamada

APP'D Y. Isawa

ENG. DEPT. DIVISION

Sales

No. AD-97-2278

SPECIFICATIONS

1. THIS SPECIFICATIONS APPLY TO RK097111202SA POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

357898
K091K200H

3. MARKING

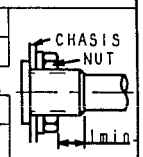
·MARKING ON ALL UNITS
DATE CODE, RESIST. VALUE, TAPER

4. REMARKS

·FURNISH PACKAGE
NUT: 1, WASHER: 1

ELECTRICAL	Single shaft (R1)
1. Total resistance:	20 kΩ± 20%
2. Rated power:	0.05W
3. Rated voltage:	Please refer to the attached.
4. Resistance taper:	Please refer to the attached.
5. Tap position:	———
6. Tap resistance between terminals:	———
7. Residual resistance between terminals:	1&2, 2&3 : 30Ω max.
8. Sliding noise : (Measured by JIS C 6443)	Less than 100mV
9. Insulation resistance :	More than 100 MΩ at 250V D.C.
10. Withstand voltage:	300V A.C. for 1 minute.
11. Gang error :	———
12. switch rating: (Resistor load)	3A 16V D.C. (min:10mA)
13. Switch contact resistance: (Measured by the 1A 5V D.C. voltage drop method.)	Initial value :100mΩ max. After 10,000 cycles:200mΩ max.
14. Circuit:	———

MECHANICAL	
1. Total rotational angle :	$300^{+10}_{-5}°$
2. Rotational torque: (Rotational speed 60°/sec.)	20-250 gf·cm.
3. Stopper strength :	5 kgf·cm min.
4. Resistance to soldering heat :	Please refer to the attached.
5. Bushing nut tightening strength :	Tightening torque to be no greater than 10 kgf·cm. *Pay attention otherwise the strength may not be assured.
6. Push / pull strength :	No damages with an application of Push or pull force 10 kgf for 10 sec.
7. Shaft wobble : (Apply the moment of 500gf·cm at the point of 30mm from monting surface)	0.5 XL/30mm p-p max. (L:Shaft length) (If the shaft length is less than 30mm, the value shall be calculated proportionally.)
8. Operation force of shaft:	———
9. Click position :	———
10. Click torque:	———
11. Rotation play at the click position:	———
12. Contact arrangement :	S.P.D.T. (PUSH ON·PUSH OFF)
13. Switching stroke :	1.5±0.5mm
14. Switch operation force :	2kgf以下



ENDURANCE	
1. Rotational life :	More than 15,000 cycles.
2. Switching life :	More than 10,000 cycles.

NOTES
1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. This type is protected against sulfides.

ALPS ELECTRIC CO., LTD.

TITLE
SPECIFICATIONS

SYMB	DATE	APPD	CHKD	DSGD

APPD.	CHKD.	DSGD.	No.
May. 05. '94 R. Arasawa	May. 05. '94 M. Endo	May. 05. '94 T. Yamaguti	357898

Rated voltage :

The rated voltage shall be the voltage of D. C. or A. C. (commercial frequency , effective value) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following , however, the maximum working voltage of the following shall be the rated voltage.

$$E = \sqrt{P \cdot R} \ (V)$$

Where E : Rated voltage (V)
P : Rated power (dissipation) (W)
R : Nominal total resistance (Ω)

Maximum working voltage : 50 V A. C. , 10 V D. C.

Resistance to soldering heat

There shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of soldering.

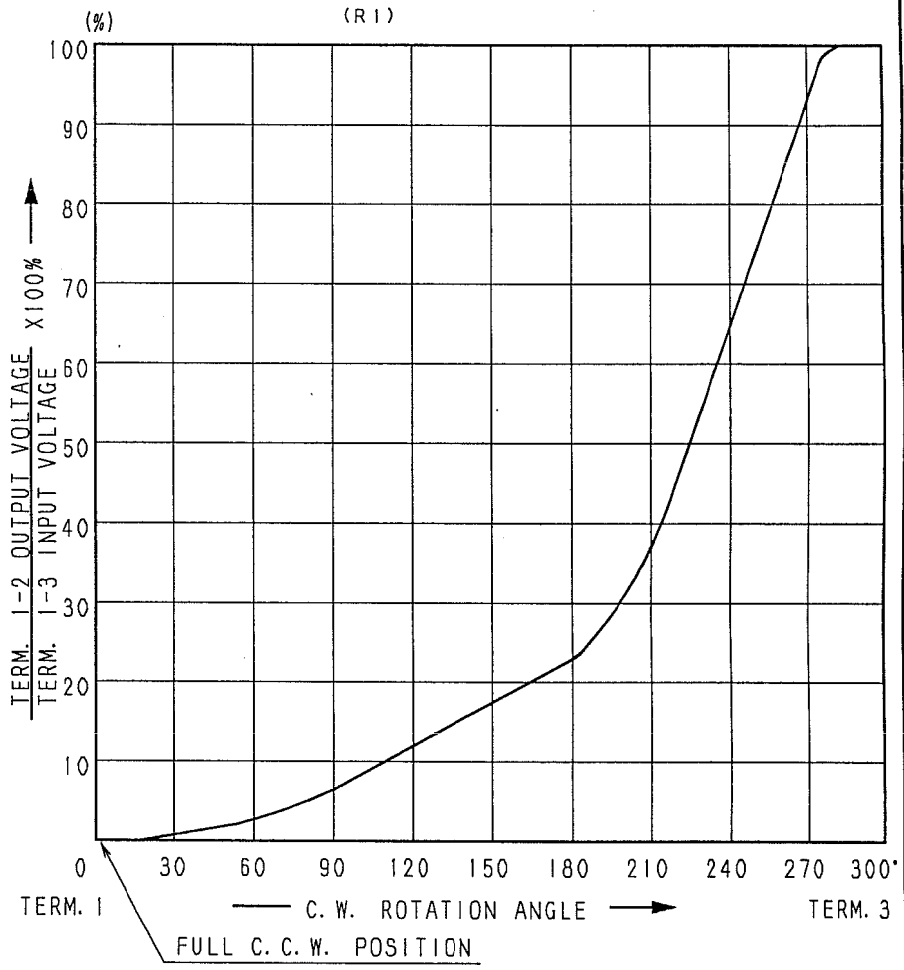
- Dip soldering
  Condition of soldering :
  Soldering shall be certified with following condition.
  Substrate to be soldered :
  Copper clad laminated phenol board in one surface of 1. 6 mm thickness.
  Solder flux :
  Flux of 0. 82 specific weight in bubbling type solder fluxcoating apparatus shall be used and bubbling surface height shall be defined substantially as half thickness of substrate.
  Flux shall not flow up on substrate surface.
  Preheating :
  Surface temperature of substrate shall be settled within 100°C in 2 minutes.
  Dip soldering :
  To be performed in 260±5°C , 5±1 sec.

  Please use the above process only 1 or 2 times.

- Manual soldering
  To be performed in 3 seconds within 300°C.

					APPD.	CHKD.	DSGD.	NAME
					May. 23. '94	May. 23. '94	May. 23. '94	
SYMB	DATE	APPD	CHKD	DSGD	R. Arasaka	M. Endo	I. Yanasuti	DOCUMENT NO.

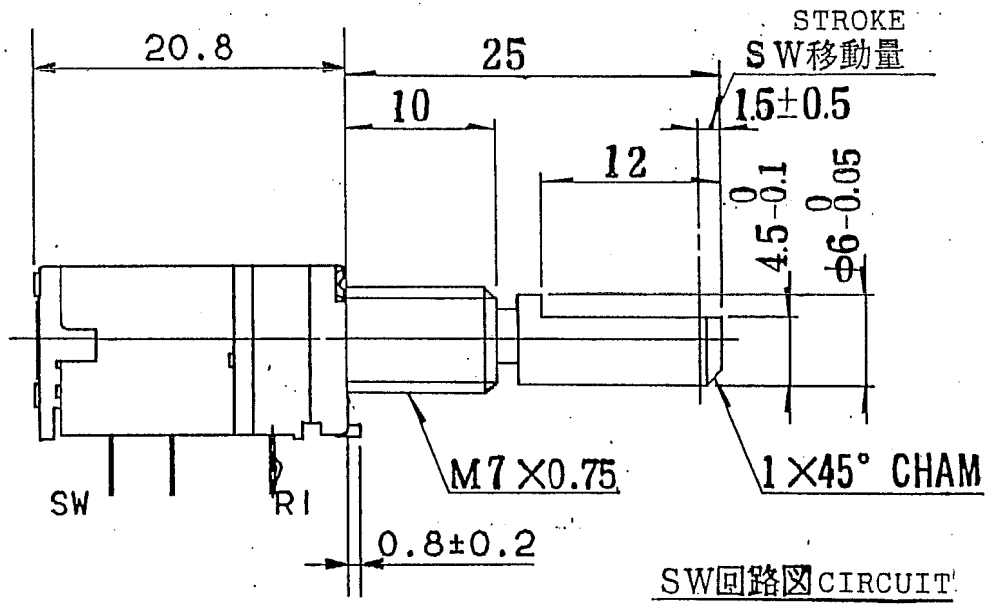
ALPS ELECTRIC CO., LTD
1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN

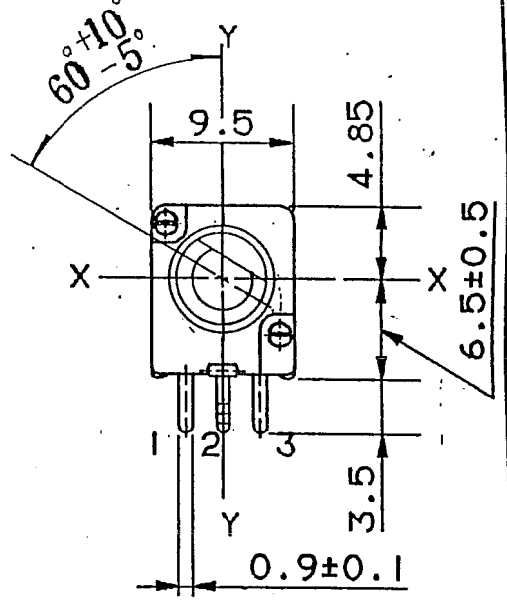


AT 150° C. W. SHAFT ROTATION FROM FULL C. C. W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN 10-25 PERCENT.

					APPD.	CHKD.	DSGD.	NAME K09-A01
					Nov. 23. '94	Nov. 23. '94	Nov. 23. '94	RESISTANCE TAPER
SYMB	DATE	APPD	CHKD	DSGD	K. Kawai	S. Sasaki	K. Suzuki	DOCUMENT NO. 357898

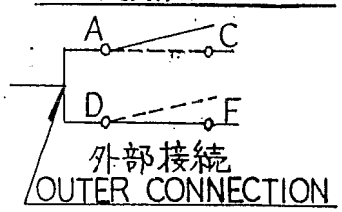
NOTES
BUSHING MATERIAL—ZINC ALLOY DIE CASTING
SHAFT MATERIAL——ALUMINUM



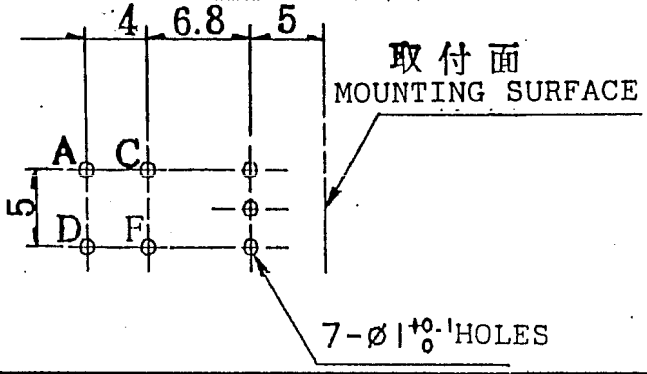


上図は 軸 を反時計方向に
回し切った状態を示す。
SHAFT SHOWN IN FULL CCW POSITION

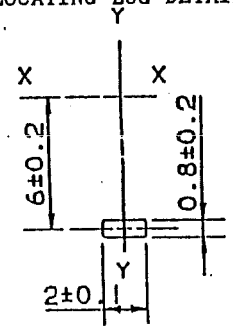
SW回路図 CIRCUIT



取付穴寸法図
許容差±0.1（挿入側より）
P.W.B.MOUNTING DETAIL
TOLERANCE ± 0.1
VIEWED FROM MOUNTING SIDE



シャーシ止メ詳細図
LOCATING LUG DETAIL



許容差の指定なき寸法の公差 TOLERANCES UNLESS OTHERWISE SPEC	
BASIC DIMENSIONS	TOLERANCE
L≦10	±0.3
10<L<100	±0.5
100≦L	±0.8
角度 ANGULAR DIMENSION	±5°

SYMB.	DATE	APPD.	CHKD.	DSGD.
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	. .			
	. .			
	. .			

PART NO. | NAME | MATERIAL NAME & CODE | FINISH

W生設課 62.3.19 日下 APPD.
W生設課 62.3.19 阿部(彰) DSGD.
CHKD.
UNIT mm
SCALE

ALPS ALPS ELECTRIC CO., LTD.

TITLE 9 形1軸単連
PUSH・PUSH SW付VR 組 立 図
DOCUMENT NO. K091K2004
5R2412

(A4・図面用紙) W0301-B A4 61.11.10
6.7.2
64.6